



1765126 - R8 SDMS

08/28/2001
STATE OF COLORADO

AUG 28 2001

Bill Owens, Governor
Jane E. Norton, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80246-1530
Phone (303) 692-2000
Located in Glendale, Colorado

Laboratory and Radiation Services Division
8100 Lowry Blvd.
Denver CO 80220-6928
(303) 692-3090

<http://www.cdph.state.co.us>



Colorado Department
of Public Health
and Environment

RECEIVED

AUG 24 2001

OFFICE OF THE
ATTORNEY GENERAL
NATURAL RESOURCES &
ENVIRONMENT SECTION

August 20, 2001

Darcy O'Connor, 8ENF-T
U.S. EPA Region 8
999 18th Street, Suite 500
Denver, CO 80202

**Re: Industrial Wastewater Discharge Inspection Report for:
Rico Development Corporation St. Louis Tunnel Mine and Mill Site
CDPS Permit # CO-0029793
approx. 1 mile north of Rico, Dolores County, Colorado**

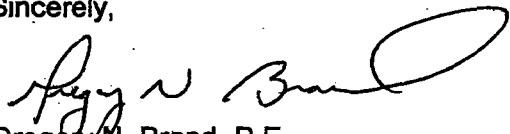
Dear Ms. O'Connor:

Attached please find a copy of Colorado Department of Public Health and Environment - Water Quality Control Division's May 7, 2001 inspection report for the above listed facility.

Please copy and distribute this report as you deem necessary.

If you have any questions or wish to discuss this situation further, please feel free to call me at (970) 247-5702, ext # 273.

Sincerely,


Gregory M. Brand, P.E.
District Engineer - Durango District Office
Water Quality Control Division

cc: Eric Heil, Town of Rico
LeRoy Gore, Dolores County Commissioners
Tony Trumbly, Colorado Department of Law
Richard Bowman, WQCD-Grand Junction
Carla Lenky, WQCD-Denver
Leslie Simpson, WQCD-Denver

attachment: inspection report



Printed on Recycled Paper

CDPS/NPDES FACILITY INSPECTION REPORT

SECTION A: NATIONAL DATA SYSTEM CODING

Transaction Code 1 <u>N</u> 2 <u>5</u>		CDPS/NPDES 3 <u>C</u> 4 <u>0</u> 5 <u>0</u> 6 <u>0</u> 7 <u>2</u> 8 <u>9</u> 9 <u>7</u> 10 <u>9</u> 11 <u>3</u>		yr/mo/day 12 <u>0</u> 13 <u>1</u> 14 <u>0</u> 15 <u>5</u> 16 <u>0</u> 17 <u>7</u>		Inspection Type 18 <u>C</u>		Inspector 19 <u>S</u>		Fac Type 20 <u>2</u>	
Remarks (See Code)											
21 Reserved 22 Facility Evaluation Rating 23 BI 24 QA 25 CO 26 Operator In Charge 27 Class & Cert. # 28 <u>None</u>											

SECTION B: FACILITY DATA

Name of Facility Inspected <u>Rico Development Corp. St. Louis Tunnel Mine & Mill Site</u>		Entry Time <u>12:30</u>		<input type="checkbox"/> AM <input checked="" type="checkbox"/> PM		Permit Effective Date <u>2-1-94</u>	
Physical Location <u>1 mile north of Rico, CO, just east of Dolores River</u>						Permit Expiration Date <u>1-31-99</u>	
Name(s) of On-Site Representative(s) <u>None</u>				Title(s) <u>X</u>		Phone No(s) <u>X</u>	
Address <u>X</u>				City <u>X</u>		State <u>X</u>	
Name of Person Conducting Inspection <u>Greg Brand (WQCD-Durango)</u> and				<u>Jess Vann (WQCD-Grand Junction)</u>			

SECTION C: AREAS EVALUATED DURING INSPECTION

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

<input type="checkbox"/> U	Permit	<input type="checkbox"/> U	Flow Measurement	<input type="checkbox"/> N	Pretreatment	<input type="checkbox"/> U	Operations & Maintenance
<input type="checkbox"/> U	Records/Reports	<input type="checkbox"/> U	Laboratory	<input type="checkbox"/> U	Compliance Schedules	<input type="checkbox"/> U	Sludge Disposal
<input type="checkbox"/> U	Facility Site Review	<input type="checkbox"/> U	Effluent/Receiving Waters	<input type="checkbox"/> U	Self-Monitoring Program	<input type="checkbox"/> -	Other:

SECTION D: OPERATION MAINTENANCE

Operator in Charge: None No. of Operators: 0

Budget: \$ X Salaries: \$ X Utilities: \$ X Maintenance: \$ X

Chemicals: \$ X Sludge: \$ X Other: \$ X Unit Trmt. Cost/1,000 gals.: \$ X

Collection System: No. of Taps: NA No. of Lift Stations: None

Pop. Eq. Served: NA I/I Program: NA Treatment Process: lime addition to mine drainage, series of settling ponds, discharge to Dolores River.

Design Capacity: Hydraulic: Greater than 1 MGD Organic: NA

Present Loading: Hydraulic: ~ Approx 1 MGD Organic: NA % Cap. NA

SECTION E: MONITORING AND COMPLIANCE

Type and location of flow measuring equipment: 9" wide Parshall Fume

Accurate, (Yes/No): Unknown If (No), Comment: Unknown

Date of Last Calibration: Unknown

Lab performing DMR analysis: Permittee has discontinued monitoring

Analysis in compliance with approved procedures, (Yes/No): No If (No), Comment: Permittee has discontinued monitoring

Sampling in compliance with permit requirements, (Yes/No): No If (No), Comment: Permittee has discontinued monitoring

Physical description of receiving stream: Dolores River @ outfall 002 looked OK.

Does facility meet permit requirements: No

List facilities deficiencies: See Pages 3 + 4 of attached Inspection Narrative.

Comments: See Pages 3 + 4 of attached Inspection Narrative.

**Colorado Department of Public Health and Environment
Water Quality Control Division
Industrial Wastewater Discharge Inspection Report for:**

Page 1 of 4

Rico Development Corporation
St. Louis Tunnel Mine and Mill Site
CDPS Permit # CO-0029793
approx. 1 mile north of Rico, Dolores County, Colorado

Date of Inspection: May 7, 2001

Inspectors:	Gregory Brand, District Engineer	and	Jess Vann, Technician
	Durango District Office		Grand Junction Regional Office
	Water Quality Control Division		Water Quality Control Division
	ph# 970-247-5702 ext # 273		ph# 970-248-7155

On May 7, 2001, G. Brand contacted Rico Properties (Rico, CO) and Rico Renaissance (Telluride, CO) to inform them of WQCD's inspection at the Rico Development Corporation St. Louis Tunnel Mill and Mine Site ("the Site") scheduled for May 5, 2001. **See attached 1-page Log Book Notes for details on contact attempts by G. Brand.** Although, neither of these parties admit ownership or responsibility for the site and wastewater treatment facilities, neither parties have objected to WQCD visiting the Site. Both these parties have offered their assistance to WQCD if we needed any. Mr. W. Baird (Rico Renaissance) has an on-going open invitation to WQCD and EPA to access the Site, take samples, take photographs, etc., whenever we need to.

On May 7, 2001, G. Brand also attempted but was unable to contact Mr. David Sell (Rico Development Corporation) at phone number 303-984-9276. Note that this phone number for Mr. D. Sell is WQCD-Durango's last known phone number for Mr. D. Sell.

Rico Development Corporation:

Wayne E. Webster (owner)
P.O. Box 592
Athens, Texas 75751

David L. Sell (legal contact on permit)
(address unknown)
Denver, Colorado ph# 303-984-9276

Rico Renaissance L.L.C. and Rico Properties L.L.C.

William H. Baird (developer)
Rico Renaissance LLC
P.O. Box 1260
Telluride, Colorado 81435
ph# 970-728-4306

Stan Foster (realtor, developer)
Rico Properties LLC
P.O. Box 220
Rico, Colorado 81332
ph# 970-967-5440

There is a dispute on the ownership and responsibility of the facilities covered under the permit CO-0029793. U.S. EPA Region 8 and Colorado Department of Law have filed a lawsuit against Rico Development Corporation for violations of the Clean Water Act. Litigation is currently on-going in federal court. U.S. EPA Region 8 is currently coordinating enforcement activities.

U.S. EPA Region 8 and Colorado Department of Law

Darcy O'Connor, 8ENF-T ph# 303-312-6392
Lee Hanley, 8ENF-T ph # 303-312-6555
U.S. EPA Region 8
999 18th Street, Suite 500
Denver, CO 80202

Tony Trumbly ph# 303-866-5054
Natural Resources Section
Colorado Department of Law
1525 Sherman Street, 5th Floor
Denver, CO 80203

On Monday, May 7, 2001, WQCD (G. Brand and J. Vann) conducted an inspection of the Site.

WQCD inspected the St. Louis Tunnel, the wastewater treatment facility, the St. Louis Settling Pond system, Outfall 002 which is the permitted discharge point from the Pond system to the Dolores River, and Outfall 001, also known as the Blaine Tunnel which discharges into Silver Creek.

The access road gate to the Site was unlocked and open. Snow at the Site had already melted.

A large steady flowrate (unable to estimate) of turbid orangish-yellow colored liquid was discharging from the St. Louis Tunnel Portal. The mine drainage flow apparently is suppose to split with part going directly to the Settling Pond system with the other part going to the wastewater treatment facility. The Splitter Box which is located between the St. Louis Tunnel Portal and the wastewater treatment plant was found plugged with debris.

The orangish-yellow colored mine drainage was traveling over the surface of the ground, around the wastewater treatment plant, and eventually into one of the uppermost settling ponds. Very little mine drainage flow was coming out of the underground culverts which discharge into the uppermost Settling Ponds. The underground culverts are suppose to carry the mine drainage from the Splitter Box, through or around the treatment plant, and eventually discharge into the upper most Settling Ponds.

WQCD did not see any of the orangish-yellow mine drainage being discharged directly from the St. Louis Tunnel Portal into the Dolores River. It appeared to WQCD that the mine drainage is flowing through the Settling Ponds prior to discharge to the Dolores River. For over four (4) years, the wastewater treatment plant (lime addition operation) has apparently been locked, and completely shut-down and non-operational. No records appeared to be kept on-site. No certified wastewater treatment operator was on-site.

The mine drainage flows into the Settling Pond system and then flows from one pond to the next (approximately a total of 10 ponds). The initially turbid water becomes clearer as the water flows through the Settling Pond system.

The Year 2000 Repairs to the Uppermost Settling Pond appeared in good shape. The uppermost settling pond was full of mine drainage but appeared to have enough freeboard to prevent unwanted discharges into the Dolores River. Please note that the WQCD's Year 2000 Inspection Report showed strong evidence that the uppermost pond overtopped the dike and discharged mine drainage into the Dolores River. No overtopping was occurring at the time of inspection.

The Year 2000 Repairs also included a Rip-Rap Trench across the dike which separates the uppermost settling pond and the next lower settling pond. The Rip-Rap Trench appeared in good shape. This trench allows mine drainage to flow from the uppermost to the next lower settling pond. Please note that WQCD has noted in previous inspections that the "flow-through culverts" from pond-to-pond had become plugged with sticks and debris, and that proper flow from pond to pond was not occurring. Proper routine maintenance is not occurring at the Site.

The entire wastewater surface flow from the Settling Pond system appeared to flow through permitted discharge point (Outfall 002). This discharge goes directly into the Dolores River. WQCD estimated the flowrate through the parshall flume at 565,000 gallons per day. The location of Outfall 002 was measured at Latitude 37°42.06 N, Longitude 108°01.83 W.

WQCD took water quality grab samples at Outfall 002. Field measurements were as follows: pH = 7.12, Specific Conductance = 1367, Temperature = 11.7° C.

Outfall 002 samples were taken, and sent to and analyzed at the State Laboratory (Denver, CO) for: Total recoverable ("TR") Cadmium, TR Copper, TR Lead, TR Silver, TR Zinc, Total Suspended Solids and Mercury. See attached sample results and supporting paperwork.

WQCD inspected the Blaine Tunnel (Outfall 001) which is located east of Rico, up Silver Creek. The access road was clear of snow, so WQCD was able to inspect and sample the mine drainage discharge from the Blaine Tunnel.

WQCD found the Blaine Tunnel (Outfall 001) discharging orange-colored liquid from the tunnel into Silver Creek at an estimated the flowrate of 1-3 gallons per minute (gpm).

WQCD took water quality grab samples at Outfall 001. Field measurements were as follows: pH = 2.76, Specific Conductance = (unable to measure due to strong nature of the liquid).

Outfall 001 samples were taken, and sent to and analyzed at the State Laboratory (Denver, CO) for: Total recoverable ("TR") Cadmium, TR Copper, TR Lead, TR Silver, TR Zinc, Total Suspended Solids and Mercury. See attached sample results and supporting paperwork.

Previous inspections of the Blaine Tunnel have shown that approximately 1-3 gallons per minute of low-pH mine drainage continues to discharge into Silver Creek. The Rico Development Corporation (the permittee), in 1990 supposedly sealed the Blaine Tunnel with concrete and routed this mine drainage flow from the Blaine Tunnel to the St. Louis Tunnel. The plugging of the tunnel was done to eliminate the discharge point from the Blaine Tunnel to Silver Creek (Outfall 001).

WQCD also noted problems with the Abandoned Mine Building which is located near the Blaine Tunnel and adjacent to Silver Creek. Insulation and trash were blowing from the Abandoned Mine Building into Silver Creek. See Photos.

Continuing Wastewater Discharge Permit Violations

1. PC Part I.A.1.b. Effluent Limitations from Outfall 002 WQCD strongly suspects that the wastewater treatment plant (lime addition operation) has been non-operational for over (4) four years, and that effluent limitations are being exceeded.
2. PC Part I.B.1.a. and PC Part I.B.2 According to WQCD-Denver records, the last Discharge Monitoring Report ("DMR") was filed with WQCD-Denver for August 1996. Therefore, over four (4) years of required monitoring has not been performed and reported as per permit conditions.
3. PC Part II.A.3 WQCD-Durango does not believe the permittee has provided WQCD-Denver and/or EPA Region 8 with the proper notification regarding non-compliance at Old Outfall 001 and Outfall 002.
4. PC Part II.A.5 and A.6 WQCD-Durango does not believe that the permittee notified WQCD that a bypass of the Wastewater Treatment Plant has been occurring.

-
5. PC Part II.A.9 The permittee has not taken all reasonable steps to minimize adverse impacts to State waters. For over four (4) years, the permittee has apparently stopped treating the mine drainage from the St. Louis Tunnel and monitoring Outfall 002, which discharges into the Dolores River. No routine maintenance is occurring at the Site. The Blaine Tunnel (Old Outfall 001) continues to discharge low-pH mine drainage into Silver Creek.
 6. PC Part II.A.12 For over four (4) years, the permittee has apparently not properly operated and maintained all facilities and systems of treatment and control which are included under this permit. Lack of operation and routine maintenance have allowed the "flow-through culverts" at the Wastewater Treatment Plant to become plugged. Thus the untreated orangish-yellow colored mine drainage is traveling over the surface of the ground, around the Wastewater Treatment Plant, and eventually into one of the uppermost settling ponds.
 7. PC Part II.B.3 Although the permittee (Rico Development Corporation) claims that they are not responsible for the site or the permit, no transfer of ownership or control of this permit was made in accordance with this permit condition. WQCD-Durango is not aware of any written agreements regarding transfer of permit responsibility, coverage and liability.
-

WQCD-Durango District Office will continue to support U.S. EPA, the Colorado Department of Law, and WQCD-Denver as needed.

Attachments: May 7, 2001 inspection report form by WQCD.

May 7, 2001 inspection photographs by WQCD.

May 7, 2001 1-page Log Book Notes on details of contact attempts by G. Brand.

Outfall 002 and Outfall 001 Analytical Sample Results and supporting paperwork.



Pan-o-ramic View of
St. Louis Tunnel Mine & Mill
Site.

Photo 1

5-7-2001

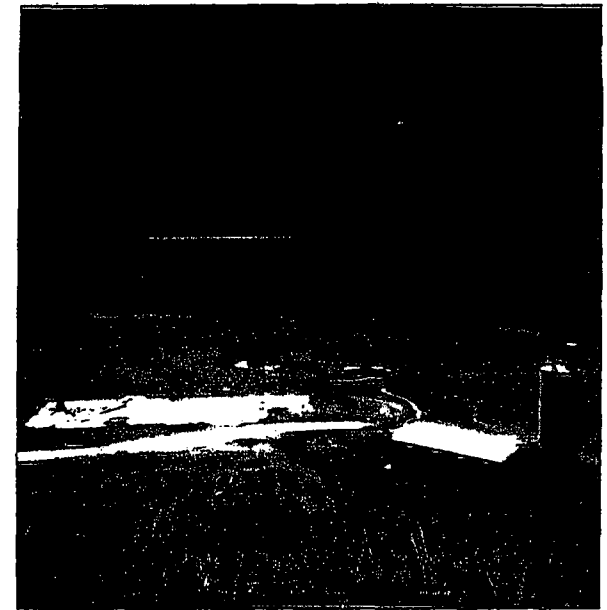


Pan-o-ramic View

Photo 2

Photo 2

5-7-2001



Pan-o-ramic View

Photo 3

Photo 3

5-7-2001

Inspection of site and waterwater facilities at:

Rico Development Corporation
St. Louis Tunnel Mine & Mill Site
CDPS Permit Number CO-0029793
Dolores County, Colorado

Photos by: Greg Brand, District Engineer
WQCD-Durango

See 5-7-2001 Inspection Report

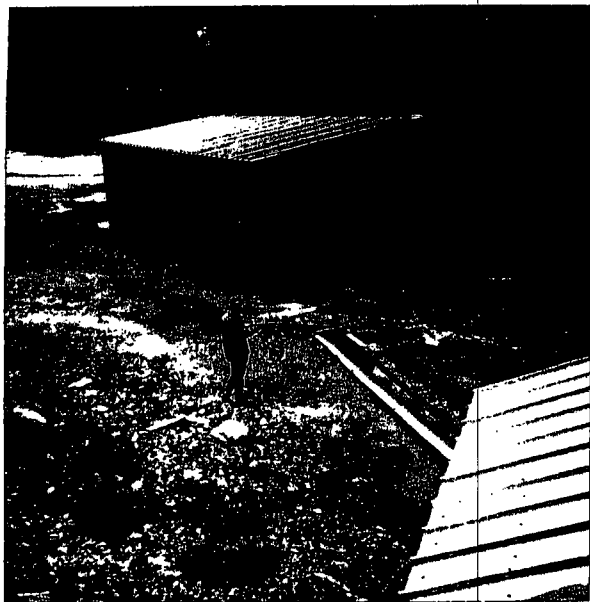
Photo Page 1 of 3



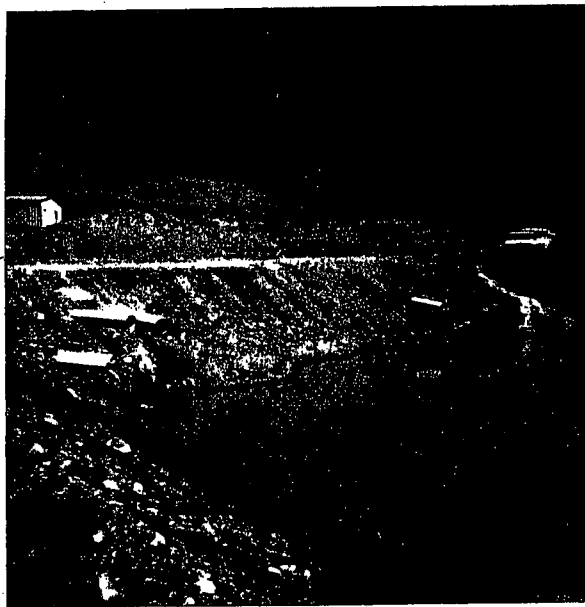
Photo 4

Pan-o-ramic View

5-7-2001



Splitter Box at Wastewater Treatment Plant is plugged. Mine drainage is travelling across ground surface. 5-7-2001



Most of the upper Culverts are plugged. No flow through these culverts. Almost all mine drainage is flowing over the ground surface. See by State Vehicle. 5-7-2001



Site where spill occurred in year 2000. Year 2000 Repairs to Uppermost Settling Pond in good shape. 5-7-2001



Year 2000 Repairs - RipRap Trench across Dike which separates uppermost Settling Pond and next lower Pond in good shape, 5-7-2001

Inspection of site and wastewater facilities at:

Rico Development Corporation
St. Louis Tunnel Mine & Mill Site
CDPS Permit Number CO-0029793
Dolores County, Colorado

Photos by: Greg Brand
WQCD-Durango

See 5-7-2001 Inspection Report

Photo Page 2 of 3



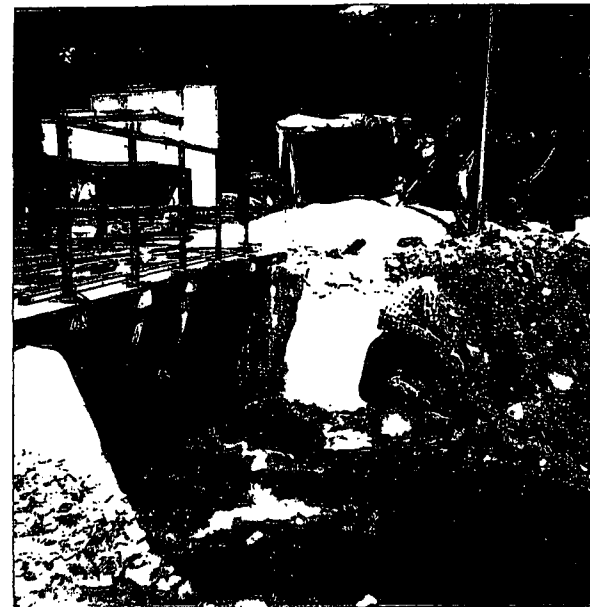
Samples being taken by Jess Vann (WQCD-Grand Junction) at Outfall 002, 5-7-2001



Jess Vann (WACD - Grand Junction)
samples Blaine Tunnel Discharge.
5-7-2001



Sampling of Blaine Tunnel Discharge
5-7-2001



Sampling of Blaine Tunnel Discharge.
5-7-2001



Closeup of Mine Drainage from the
Blaine Tunnel discharging into
Silver Creek. Note: Foam under the
foot of Jess Vann in Silver Creek
5-7-2001

Inspection of site and
wastewater facilities at:

Rico Development Corporation
St. Louis Tunnel Mine & Mill Site
CDPS Permit Number CO-0029793
Dolores County, Colorado

Photos by: Greg Brand
WACD - Dorango

See 5-7-2001 Inspection Report.

Photo Page 3 of 3



Abandoned Mine Building near Blaine Tunnel.
Silver Creek in fore-ground. Note:
Insulation & Trash blocking into
Silver Creek 5-7-2001

MONDAY MAY 7, 2001

Greg Brand
WQCD - Durango
Log Book Notes

Stop & get Polaroid Film

Will Drive to Rico to meet Jess Vann for
Rico Development Corp - St Louis Tunnel
WW Inspection (Major Facility)

Yes samples will be taken.
Contact attempts by Greg Brand

~10:05am Greg phoned (303) 984-9276

- call screening first
- no response
- no message left

Dave Selt's
last known by WQCD-Durango
phone number

New phone number (maybe?)

~10:08am

Greg phoned (970) 728-4306 (William Baird
Rico Renaissance)
- got answering machine
- Greg left a detailed message
also asking for someone to call Greg back to confirm
message was received.
New phone number (maybe?)

~~Wrong phone number~~

~10:12am

Rico Properties & Rico Renaissance

→ Lynn Lang, Office Manager, located in Rico, Colorado.

→ Lynn gave WQCD permission to access the site.

Lynn gave Greg phone numbers for William Baird (partner w/ Rico Renaissance)

→ Florida ph# (941) 561-2221

→ Telluride ph# (970) 728-4306 OK!
Mountain
Construction

~10:17am

Greg left message on Tony Trumbly's (AFO-Denver)

phone mail (303) 866-5054

Greg left message on WW Inspection.

~10:18am

Monica Heimdal US-EPA-Region 8-Denver (303) 312-6353

Monica
is on
leave

Monica will be returning phone calls on Wed May 8th

Greg left message on WW Inspection

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
INORGANIC CHEMISTRY LABORATORY
P.O. BOX 17123, DENVER, CO 80217-0123
(303) 692-3048

DATE: 06/06/01
REPORTED BY: MS

SAMPLE NUMBER: 20012000
SAMPLE DESCRIPTION: CDPHE-WQD CO-0029793 C/O RON FALCO

ADDRESS :

COUNTY: DLR
PHONE :

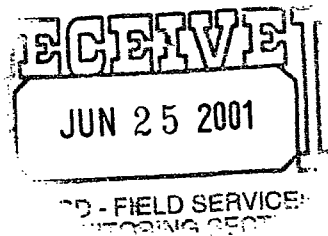
0

COLLECTED BY: JESS VANN
WHERE: ST. LOUIS TUNNEL/002
DATE SAMPLED: 05/07/01
DATE RECEIVED: 05/11/01
BOTTLES: LNEUT, LM, M
TYPE: 4
COMMENTS: RICO DEVELOPMENT CORPORATION
NO FM FOR HARDNESS

ANALYSIS RESULTS

CADMIUM	4.8	ug/L
COPPER	< 20	ug/L
HARDNESS, TOT. ***	NO BOTTLE	mg/L
LEAD	< 1	ug/L
MERCURY	< 0.2	ug/L
SILVER	< 0.2	ug/L
SOLIDS, SUS.	< 10	mg/L
ZINC	1100	ug/L

*** AS CaCO3



W/W Comments



Colorado Department
of Public Health
and Environment

Laboratory and Radiation Services Division
8100 Lowry Boulevard, Denver CO 80230-6928
US Mail: PO Box 17123, Denver CO 80217
(303) 692-3090 fax (303) 344-9989

LABORATORY USE ONLY

REQUEST FOR ANALYTICAL SERVICES

TripID Collection No:

YEAR MONTH DAY Collector's 3 Inits

010507 JAY

CUSTOMER

CustomerID : WT000255

Name : CDPHE-WQD-Monitor#

Address : 4300 Cherry Creek Drive South

City/ST/Zip : Denver, CO 80246-1530

Contact : Ron Falco, WQCD, TSU

Phone : (303) 692-3569

SAMPLE INFORMATION

Collected:

05/07/01
month day year

MILITARY

TIME:

13.45
hour min

Collected by:

Jess VAWN

Matrix:

☐ Routine

☐ Rivers/Streams/Lakes

☐ TMDL

☒ Discharge

Test Panel

SITE

Permit No. CO-0029793

Description: Rico Development Corporation

St. Louis Tunnel / Outfall 002

☐ New Station?

County: Dolores

BOTTLE INFORMATION

Sample Type :

☒ Sample

☐ Trip Blank

☐ Field Blank

☐ Duplicate

Mark numbers of bottles in box

BOTTLE	M	FM	Neut	Nut	Hg	CN	Number
250mL	1						1
500 mL							
Liter :	1		1				2
2 Liter							
Micro							
Other :							

TEST ORDER (Check appropriate box) :

CHEMISTRY

METALS

TR diss Total

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Aluminum
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Antimony
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Arsenic
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Cadmium
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chromium
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Copper
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hardness, total
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Iron
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Lead
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Magnesium
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Manganese
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Mercury
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Nickel
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Potassium
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Selenium
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Silver
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Zinc

NUTRIENTS

<input type="checkbox"/>	Nitrite/nitrite
<input type="checkbox"/>	Nitrogen, Ammonia
<input type="checkbox"/>	Nitrogen, Kjeldahl
<input type="checkbox"/>	Nitrogen, Total
<input type="checkbox"/>	Phosphate, Total

NO BOTTLE NEUTRALS

<input type="checkbox"/>	Alkalinity, Total
<input type="checkbox"/>	BOO
<input type="checkbox"/>	Chloride
<input type="checkbox"/>	Conductivity
<input type="checkbox"/>	Fluoride
<input type="checkbox"/>	Nitrite
<input type="checkbox"/>	Phosphate, Ortho
<input type="checkbox"/>	Sulfate
<input type="checkbox"/>	Solids, Dissolved
<input checked="" type="checkbox"/>	Solids, Total suspended
<input type="checkbox"/>	Solids, Total

OTHER

<input type="checkbox"/>	Cyanide, dist
<input type="checkbox"/>	Sulfide

FIELD TEST

pH:	7	12	s.u. @ 11.7°C
Alkalinity total:	156		mg/L
Conductivity, field:	1367		uS/cm
Discharge flow:	0	565	MG/D
Oxygen, Diss:	8	16	mg/L
Stream flow:			cfs
Temp, air:	10		C
Temp, stream:			C

RADIOCHEMISTRY

<input type="checkbox"/>	Radium 226
<input type="checkbox"/>	Radium 228
<input type="checkbox"/>	

MICROBIOLOGY

<input type="checkbox"/>	Fecal Coliforms, MTF
<input type="checkbox"/>	E Coli, MPN
<input type="checkbox"/>	

J VAWN, L M, M.

WATER QUALITY DATA

Water Lab No. 20012000Colorado Department of Health
Water Quality Control Division

DISCHARGE SAMPLE

Bacti Lab No. _____

Rec'd By: _____

Name of Sampling Location:
St. Louis Tunnel/ Outfall 002
SC: CO-0029793Date and Time Collected:
0105071345
Y Y M M D D Hrs. Min.Remarks:
Rico Development Corporation
GRAB SAMPLES COLLECTED
AT EFFLUENT FLUME-002

County:

Dolores

If Composite Sample:

Hrs. Min. To _____
Hrs. Min.

Name of Sampler:

Jess Vann

Date Received in Water Lab:

Y Y M M D D Hrs. Min.River Sample: Circle if Apply
Complete Incomplete SpecialDate Reported:
010608
Y Y M M D D

P60 STREAM FLOW (cfs)

P1002 ARSENIC (ug/l)

P1067 NICKEL (ug/l)

P50050 DISCHARGE FLOW (MG/D)

P945 SULFATE (mg/l)

P1147 SELENIUM (ug/l)

P11 TEMPERATURE (F)

P665 T-PHOS as P (mg/l)

P1077 SILVER (ug/l) T.R.

P400 pH (Standard Units)

P70507 ORTHO PHOS as P (mg/l)

P1092 ZINC (ug/l) T.R.

P299 DO (mg/l)

P900 T-HARDNESS as CaCO₃
(mg/l)

P1034 T-CHROMIUM (ug/l)

P50060 TRC (mg/l)

P1012 BERYLLIUM (ug/l)

P1032 HEX. CHROMIUM (ug/l)

P410 T-ALK as CaCO₃ (mg/l)

P1027 CADMIUM (ug/l) T.R.

P22703 URANIUM-Natural (ug/l)

P556 O & G (mg/l)

P1022 BORON (ug/l)

P1501 GROSS ALPHA (pc/l) P1502

P31615 F-COLI. (per 100 ml)

P1042 COPPER (ug/l) T.R.

P9503 GROSS BETA (pc/l) P9504

P310 BOD (mg/l)

P1045 IRON (ug/l)

P3501 DIS. RAD.-226 (pc/l) P3502

P530 TSS (mg/l)

P1051 LEAD (ug/l) T.R.

P81366 DIS. RAD.-228 (pc/l) P81367

P70300 TDS (mg/l)

P1055 MANGANESE (ug/l)

P610 AMMONIA as N (mg/l)

P95 COND (micromhos)

P71900 MERCURY (ug/l) TOTAL

P625 TKN as N (mg/l)

P720 T-CYANIDE (mg/l)

P1062 MOLYBDENUM (ug/l)

P630 NITRITE/NITRATE as N
(mg/l)

DISCHARGE SAMPLE

Water Lab # _____

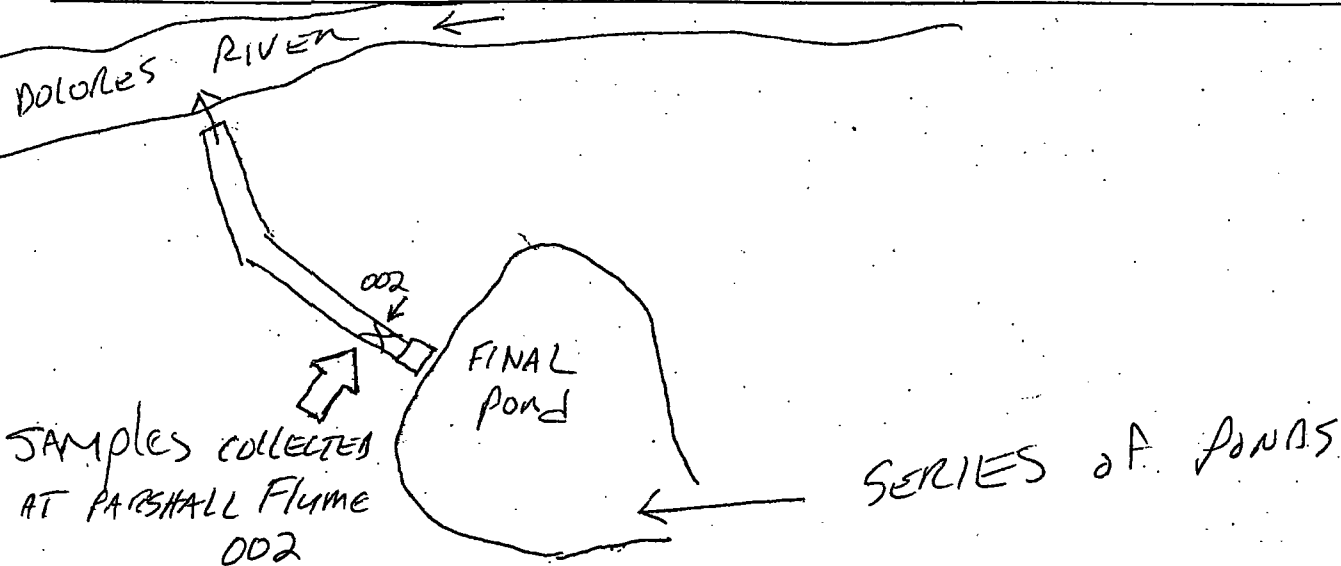
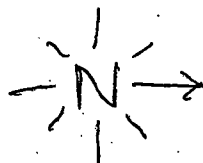
P615 NITRITE as N (mg/l) [][][][]	P937 POTASSIUM (mg/l) [][][][]	FECAL COLIFORM / GRAB SAMPLE				
P620 NITRATE as N (mg/l) [][][][]	P1105 ALUMINUM (ug/l) [][][][][]	FLOW PROPORTIONED COMPOSITE:				
P340 COD (mg/l) [][][][]	FLOW MEASURING DEVICE: 9" PARSHALL FLUME AT EFFLUENT. 0.44 FT: DEBRIS UPSTREAM OF FLUME.	BOD & TSS	Flow	Increment	NH3-	
P940 CHLORIDE (mg/l) [][][][]		#	Time	in MGD	in ml	incr
P951 FLUORIDE (mg/l) [][][][]						
P32730 PHENOL (ug/l) [][][][]						

N

CALCULATIONS:

$$\left(\frac{\text{FLOW in MGD}}{\text{NUMBER of samples}} \right) \times \left(\frac{\text{TOTAL SAMPLE required in ml}}{\text{AVERAGE FLOW in MGD}} \right) = \text{INCREMENT}$$

Sketch of Sampling Location:



ST. LOUIS

MINE PORTAL

Stream or Plant Condition
MINE PORTAL DISCHARGE
→ SERIES of SETTLING
Ponds → DISCHARGE

Sample Appearance

CLEAR

Weather

~ 50°
SUNNY &
LIGHT WIND

Page ____ of ____

List of Samples to be Relinquished with Date of Sampling, Site #, or Sample # or ID, and Description

[illegible]

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
INORGANIC CHEMISTRY LABORATORY
P.O. BOX 17123, DENVER, CO 80217-0123
(303)692-3048

DATE: 06/07/01
REPORTED BY: VF

SAMPLE NUMBER: 20011999
SAMPLE DESCRIPTION: CDPHE-WQD CO-0029793 C/O RON FALCO

ADDRESS :

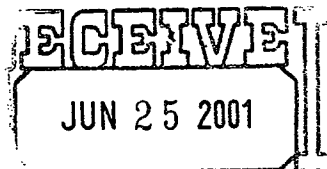
COUNTY: DLR
PHONE : 0

COLLECTED BY: JESS VANN
WHERE: BLAINE TUNNEL/ SITE 001
DATE SAMPLED: 05/07/01
DATE RECEIVED: 05/11/01
BOTTLES: LNEUT, LM, M
TYPE: 4
COMMENTS: RICO DEVELOPMENT CORPORATION
NO FM FOR HARDNESS

ANALYSIS RESULTS

CADMIUM	1480	ug/L
COPPER	33000	ug/L
HARDNESS, TOT. ***	NO BOTTLE	mg/L
LEAD	180	ug/L
MERCURY	0.63	ug/L
SILVER	< 4	ug/L
SOLIDS, SUS.	18	mg/L
ZINC	220000	ug/L

*** AS CaCO3



DD - FIELD SERVICE
MONITORING SECTION



Colorado Department
of Public Health
and Environment

Laboratory and Radiation Services Division
8100 Lowry Boulevard, Denver CO 80230-6928
US Mail: PO Box 17123, Denver CO 80217
(303) 692-3090 fax (303) 344-9989

LABORATORY USE ONLY

REQUEST FOR ANALYTICAL SERVICES

TriplD Collection No:

YEAR: MONTH: DAY: Collector's 3 Inits

010507JPV

CUSTOMER

CustomerID : WT000255

Name : CDPHE-WQD-Monitor#

Address : 4300 Cherry Creek Drive South

City/ST/Zip : Denver, CO 80246-1530

Contact: Ron Falco, WQCD, TSU

Phone : (303) 692-3569

SAMPLE INFORMATION

Collected:

05/07/01
month day year

MILITARY

TIME:

15.15
hour min

Collected by:

JESS VANN

Matrix:

☐ Routine

☐ Rivers/Streams/Lakes

☐ TMDL

☒ Discharge

Test Panel

☐

SITE

Permit No. CO-0029793

Description: Rico Development Corporation

BLAINE TUNNEL / SITE - 001

☐ New Station?

County: DOLORES

BOTTLE INFORMATION

Sample Type :

- ☐ Sample
☐ Trip Blank
☐ Field Blank
☐ Duplicate

Mark numbers of bottles in box

BOTTLE	M	FM	Neut	Nut	Hg	CN	Number
250mL	1						1
500 mL							
Liter :	1		1				
2 Liter							
Micro							
Other :							

TEST ORDER (Check appropriate box) :

CHEMISTRY

METALS

TR diss Total

- | | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|-----------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Aluminum |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Antimony |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Arsenic |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Cadmium |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Chromium |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Copper |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Hardness, total |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Iron |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Lead |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Magnesium |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Manganese |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Mercury |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Nickel |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Potassium |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Selenium |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Silver |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Zinc |

NUTRIENTS

- ☐ Nitrite/nitrate
☐ Nitrogen, Ammonia
☐ Nitrogen, Kjeldahl
☐ Nitrogen, Total
☐ Phosphate, Total

NEUTRALS

- ☐ Alkalinity, Total
☐ BOD
☐ Chloride
☐ Conductivity
☐ Fluoride
☐ Nitrite
☐ Phosphate, Ortho
☐ Sulfate
☐ Solids, Dissolved
☒ Solids, Total suspended
☐ Solids, Total

OTHER

- ☐ Cyanide, dist
☐ Sulfide

FIELD TEST

pH:

2.76

s.u. @ 5.7 C

Alkalinity total:

Conductivity, field:

Discharge flow:

Oxygen, Diss:

Stream flow:

Temp, air:

Temp, stream:

RADIOCHEMISTRY

- ☐ Radium 226
☐ Radium 228
☐

MICROBIOLOGY

- ☐ Fecal Coliforms, MTF
☐ E Coli, MPN
☐

Neut, LM, M

WATER QUALITY DATA

Water Lab No. _____

Colorado Department of Health
Water Quality Control Division

DISCHARGE SAMPLE

Bacti Lab No. _____

Rec'd By: _____

Name of Sampling Location: BLAINE TUNNEL-SITE 001 SC: CO-0029793		Date and Time Collected: 0105081515 Y Y M M D D Hrs. Min.		Remarks RICO DEVELOPMENT CORP. GRAB SAMPLES COLLECTED AT DISCHARGE SITE-001	
County: DOLORES		If Composite Sample: ____ To ____ Hrs. Min. Hrs. Min.			
Name of Sampler: JESS VANN		Date Received in Water Lab: ____ Y Y M M D D Hrs. Min.			
River Sample: Circle if Apply Complete Incomplete Special		Date Reported: ____ Y Y M M D D			
P60 STREAM FLOW (cfs) ____		P1002 ARSENIC (ug/l) ____		P1067 NICKEL (ug/l) ____	
P50050 DISCHARGE FLOW (MG/D) ____ 1-3 GPM		P945 SULFATE (mg/l) ____		P1147 SELENIUM (ug/l) ____	
P11 TEMPERATURE (F°) ____		P665 T-PHOS as P (mg/l) ____		P1077 SILVER (ug/l) T.R.	
P400 pH (Standard Units) 276 AT 5.7°C		P70507 ORTHO PHOS as P (mg/l) ____		P1092 ZINC (ug/l) T.R.	
P299 DO (mg/l) ____		P900 T-HARDNESS as CaCO ₃ (mg/l) ____		P1034 T-CHROMIUM (ug/l) ____	
P50060 TRC (mg/l) ____		P1012 BERYLLIUM (ug/l) ____		P1032 HEX. CHROMIUM (ug/l) ____	
P410 T-ALK as CaCO ₃ (mg/l) ____		P1027 CADMIUM (ug/l) T.R.		P22703 URANIUM-Natural (ug/l) ____	
P556 O & G (mg/l) < 100 VISUAL		P1022 BORON (ug/l) ____		P1501 GROSS ALPHA (pc/l) P1502 ____	
P31615 F-COLI. (per 100 ml) ____		P1042 COPPER (ug/l) T.R.		P9503 GROSS BETA (pc/l) P9504 ____	
P310 BOD (mg/l) ____		P1045 IRON (ug/l) ____		P3501 DIS. RAD.-226(pc/l) P3502 ____	
P530 TSS (mg/l) ____		P1051 LEAD (ug/l) T.R.		P81366 DIS. RAD.-228(pc/l) P81367 ____	
P70300 TDS (mg/l) ____		P1055 MANGANESE (ug/l) ____		P610 AMMONIA as N (mg/l) ____	
P95 COND (micromhos) ____		P71900 MERCURY (ug/l) TOTAL ____		P625. TKN as N (mg/l) ____	
P720 T-CYANIDE (mg/l) ____		P1062 MOLYBDENUM (ug/l) ____		P630 NITRITE/NITRATE as N (mg/l) ____	

DISCHARGE SAMPLE

Water Lab # _____

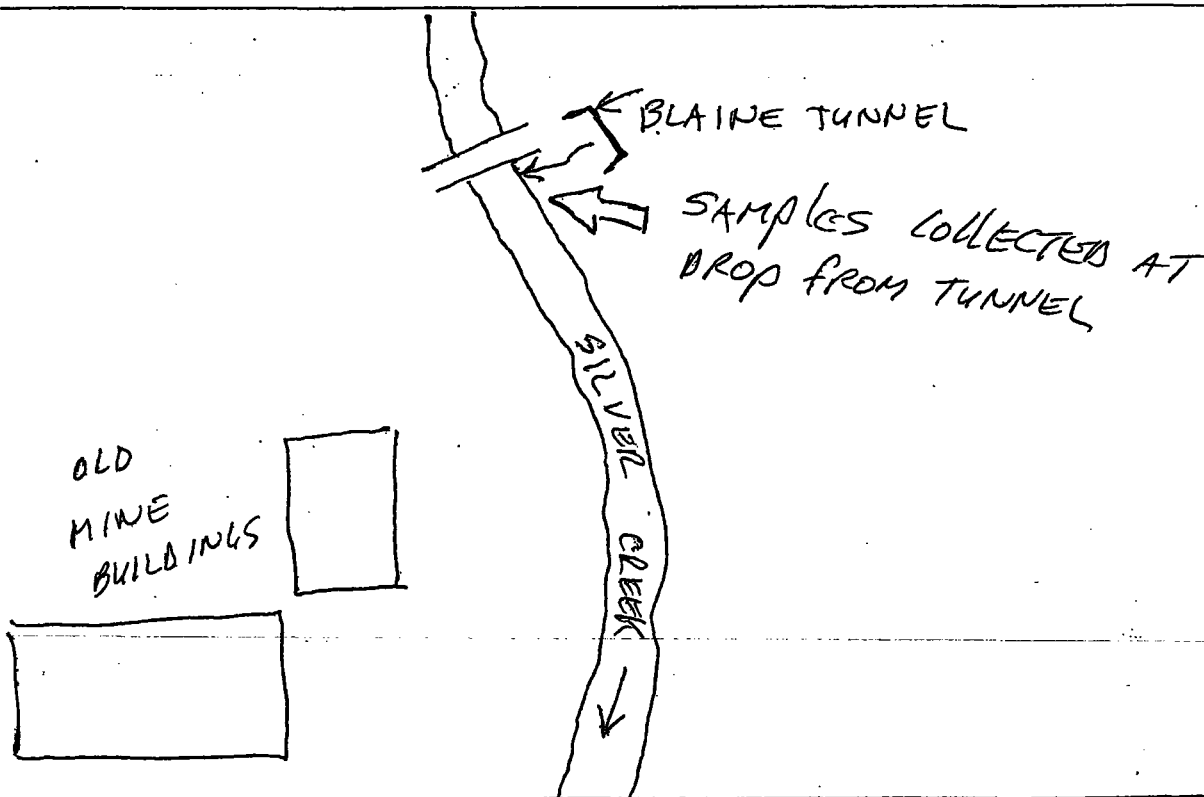
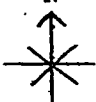
P615 NITRITE as N (mg/l) [][][][]	P937 POTASSIUM (mg/l) [][][][]	FECAL COLIFORM / GRAB SAMPLE				
P620 NITRATE as N (mg/l) [][][][]	P1105 ALUMINUM (ug/l) [][][][][]	FLOW PROPORTIONED COMPOSITE:				
P340 COD (mg/l) [][][][]	FLOW MEASURING DEVICE: BUCKET & STOPWATCH - $\frac{1}{2}$ GAL / 26 SECONDS = 1 GAL / 52 SECONDS = 1641 GAL / DAY.	BOD & TSS	Flow	Increment	NH3-	
P940 CHLORIDE (mg/l) [][][][]		#	Time	in MGD	in ml	incr
P951 FLUORIDE (mg/l) [][]						
P32730 PHENOL (ug/l) [][][][]						

N

CALCULATIONS:

$$\left(\frac{\text{FLOW in MGD}}{\text{NUMBER of samples}} \right) \times \left(\frac{\text{TOTAL SAMPLE required in mL}}{\text{AVERAGE FLOW in MGD}} \right) = \text{INCREMENT}$$

Sketch of Sampling Location:



Stream or Plant Condition

MINE PORTAL →
DISCHARGE

Sample Appearance

TURBID -
LIGHT ORANGE

Weather

~ 50°
SUNNY

Chain-of-Custody Report

Page ____ of ____

Colorado Department of Public Health and Environment
Water Quality Control Division

List of Samples to be Relinquished with Date of Sampling, Site #, or Sample # or ID, and Description

[illegible]

ENFORCEMENT MONITORING FACT SHEET

1. Name of Entity: RICO DEVELOPMENT CORPORATION 2. Permit #: CO-0029793
3. Date of Contact: _____ 4. Time of Contact: _____
5. Person contacted (name & title): DAVID SELL AT 303 984-9276 - NO ANSWER.
WILLIAM BAIRD AT 970 728-4306 - LEFT MESSAGE. LYNN LANG AT 970 967-5440
6. Phone No. where he can be reached: SEE ABOVE. 7. Contacted by: GREG BRAND
8. Date of Scheduled Sampling: 05-07-01
9. Does Representative of Entity Wish to be Present? UNKNOWN
10. If so, what is his name, title and phone number? N/A
11. Do they wish to split samples? UNKNOWN - SPLIT SAMPLE COLLECTED
12. If so, will they provide container? CDPHE CONTAINERS.
13. What arrangements have been made to meet representative and/or gain entrance to the facilities: UNABLE TO CONTACT DAVID SELL, LEFT MESSAGE ON WILLIAM BAIRD'S TELLURIDE, COLORADO'S OFFICE ANSWERING MACHINE. TALKED WITH LYNN LANG, OFFICE MANAGER FOR RICO RENAISSANCE LOCATED IN RICO, COLORADO. LEFT MESSAGE ON TONY TRUMBLY'S (AGD-DENVER) AT 303 866-5054. ALSO LEFT MESSAGE FOR US EPA - REGION 8 IN DENVER FOR MONICA HEINDAL AT 303 312-6359
14. Parameters to be monitored: BOD _____ Suspended Solids X D.O. _____ pH X
Fecal Coliform _____ Temperature _____ Turbidity _____ Chlorine Residual _____
Oil & Grease VISUAL OTHERS (list): TOTAL MERCURY, TOTAL HARDNESS AS CaCO₃, TOTAL RECOVERABLE CADMIUM, COPPER, LEAD, SILVER & ZINC.
15. Type of sample (grab or composite, describe)? GRAB SAMPLES COLLECTED
16. Special containers or preservatives? TOTAL RECOVERABLE METALS / 12 PLASTIC METALS BOTTLE. TOTAL Hg / 250ml PLASTIC METALS BOTTLE. TSS & TOTAL HARDNESS / 12 PLASTIC BOTTLE - NEUTRAL
17. Persons present during sampling (names & titles):
JESS VANN, CDPHE, WQCD, MONITORING UNIT - ENG. TECH
GREG BRAND, CDPHE, WQCD, TECH SERVICES UNIT - P.E.
18. Was sample split? SPLIT SAMPLES LEFT AT CDPHE DURANGO BRANCH LAB
19. Who received or denied split (name & title)?
SPLIT SAMPLES REMAINED IN MY CUSTODY - JESS VANN
20. Disposition of sample after collection: SAMPLES REMAINED IN MY CUSTODY UNTIL DELIVERED TO THE UPS TERMINAL IN GRAND JUNCTION AND SEALED. JESS VANN - 05-09-01

REMARKS:

DISCHARGE SAMPLES COLLECTED AT SITES - 002 AND 001

Note: If laboratory analysis of the above mentioned sample indicates a violation of the "Water Quality Control Act," these results may be used, in the future, for enforcement actions.

Signature of sampler: Jess Vann

05-07-01